Draft Environmental Assessment

WASHINGTON TOWNSHIP FIRE STATION #1

Washington Township, Michigan
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Table of Contents

Table of Contents (continued)

SECTION 1: BACKGROUND

1.1 PROJECT AUTHORITY

The Charter Township of Washington has applied for and been selected to receive a fiscal year (FY) 2009 American Recovery and Reinvestment Act (ARRA) Fire Station Construction (SCG) for the construction of a new Fire Station #1. The purpose of the FY 2009 ARRA SCG program is to jumpstart the U.S. economy, create or save millions of jobs, and put a down payment on addressing long-neglected challenges nationally. Specifically, the purpose of this grant program is to focus on these goals, and the goals of the Assistance to Firefighters Grant (AFG) program, i.e., assisting fire departments in improving their basic response capability and capacity, and improving firefighter safety. Public Law 111-5 (The American Recovery and Reinvestment Act of 2009) provides funding for this program.

In accordance with the National Environmental Policy Act of 1969, the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 Code of Federal Regulations [CFR] Parts 1500 through 1508), and FEMA regulations for NEPA compliance (44 CFR Part 10), FEMA must fully understand and consider the environmental consequences of actions proposed for federal funding. The purpose of this Environmental Assessment (EA) is to meet FEMA's responsibilities under NEPA and to determine whether to prepare a Finding of No Significant Impact (FONSI) or a Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) for the proposed project.

1.2 PROJECT LOCATION

The Charter Township of Washington is a residential based, semi-rural suburb of Detroit, located approximately 35 miles north of downtown Detroit in Macomb County, MI. Please refer to Appendix A for corresponding location maps. Per SEMCOG population data as of February 2009, the Township of Washington has an estimated total population of 22,566. This proposed station will replace the existing Station #1 and in conjunction with Station #2, provide fire and advance life support services to Washington Township only.

Alternative 1: No Action would continue to utilize the existing facility. Alternative 2: Remodel Existing Facility, would also utilize the existing facility, located at 8100 Wicker Street in Washington Township. Alternative 3: New Fire Station #1 (Proposed Action) would be constructed on an undeveloped agricultural parcel on the south side of 27 Mile Road between M-53 and Jewell Road. The proposed site has been historically used for agricultural purposes and is surrounded by agricultural land to the east, west and south, with an existing single family residence just west of the property. A multi-family residential development is located to the north of the site, across 27 Mile Road. The nearest watercourse to the site is the Yates Drain, located approximately 650 feet to the southeast of the subject property. Location maps have been provided in Appendix A and site photos in Appendix B. The geographical coordinates of the subject site are N 42° 45' 39.52" and W 83° 01' 22.08".

1.3 PURPOSE AND NEED

The receipt of this SCG award will help fund a new Fire/ALS facility to replace the existing Wicker Street Fire Station. The evolution from a small all-volunteer department to a modern full service, combination department prompted a review of the current headquarters station, as it relates to current operations. During this review, the following deficiencies were identified with the current headquarters station:

1. The ambulance must be moved out of the bay to allow for response of the 1st due engine because of apparatus bay size limitations

2. Dorm facilities are on the second floor of the station which requires personnel to traverse steep stairs one story to the apparatus bay. Additionally, the stairway has a support beam with low head clearance (6') which requires most personnel to "duck" while descending the stairs
3. Due to the station layout and additions, paid on-call and off-duty personnel must traverse the apron, in front of responding apparatus, to don their gear and respond on apparatus
4. Despite numerous and on-going repairs, the aging flat roof structure continues to leak
5. Due to persistent roof leaks and age degradation of the block & mortar, seeping moisture causes reoccurring mold and incrustations on interior walls in several areas of the station, including the bunkroom and kitchen
6. Insufficient electrical service and distribution requires numerous extension cords be used to provide standby power for apparatus
7. Placement of the station on a residential side street limits safe departure from the station and severely hampers safe and rapid access to primary roads and expressway
8. Inadequate dorm and bathroom facilities prevent the department from increasing station staffing for peak periods and special events
9. Numerous plumbing deficiencies exists, and are re-occurring due to older galvanized plumbing

In accordance with federal laws and FEMA regulations, the EA process for a proposed federal action must include an evaluation of alternatives and a discussion of the potential environmental impacts. This EA was prepared in accordance with FEMA's regulations as required under NEPA. As part of this NEPA review, the requirements of other environmental laws and executive orders are addressed.

1.4 EXISTING FACILITY

Washington Township is comprised of residential, agricultural, commercial and light industrial properties and is currently protected by two fire stations, covering approximately 36 square miles. The Headquarters Station# 1, constructed in the 1950's, was built when the department was a single station, with all paid on-call personnel (no station staffing) and two apparatus. The exponential growth in the Township has resulted in the department evolving into a combination department with 21 fulltime line personnel, 3 command and 2 administrative personnel operating out of two stations. The current configuration has this station housing seven pieces of apparatus and staffing which includes four fulltime suppression/EMS personnel per day, supplemented by 14 Paid on-call personnel and five command & administrative personnel.

SECTION TWO: ALTERNATIVE ANALYSIS

As a component of this environmental assessment, the applicant is required to provide alternatives to the proposed project. For the purposes of this evaluation, three alternatives have been considered; no action, remodeling of the existing station or construction of a new station.

2.1 ALTERNATIVE 1 – NO ACTION

Under this alternative, the fire department would continue to run its operations out of the existing 50-year old headquarters station without any alteration or changes to the station. Given the serious deficiencies found in the review process, and the potentially negative impact on fire personnel and the public, this alternative was not deemed optimal.

2.2 ACTION ALTERNATIVE 2 – REMODEL EXISTING STATION

The second alternative explored the feasibility of renovating the existing station to comply with current standards and properly house the required apparatus and personnel assigned to the station. In considering this option, it was recognized that it would not resolve the apparatus response issues due to the physical location and existing road configuration.

Due to lot size restrictions, the only option to add square footage to the current structure was to remain in the existing footprint and convert the building to a three story structure. Given the rapid response requirements for personnel, this would have most likely led to the administrative offices being located on the 3rd level. Having a 3rd level administrative section in turn led to issues with accessibility and would have required the costly addition of an elevator to the building.

Additionally, when the required renovations were calculated, the cost exceeded the comparative cost for total square footage as compared to a new structure.

Another consideration that negatively impacted the alternative to renovate was the need to vacate the station for several months during renovations. Currently, there are no suitable properties available to temporarily house the fire department operations during the renovation.

2.3 ALTERNATIVE 3 – NEW FIRE STATION #1 (PROPOSED ALTERNATIVE)

The third option explored the feasibility of purchasing land at an alternate location to construct a new station. In exploring this option, the Township contracted with Plante & Moran CRESA, LLC in late 2007 to conduct a fire station analysis which included current station locations and acceptable new locations, station space considerations/needs, financial considerations and impact for the 36-square mile Township. As previously noted, the current headquarters Station #1 is in need of replacement due to size constrictions and overall condition. The current configuration and condition of the aging station presents various health and safety risks to the on-duty and paid on-call personnel. Additionally, the location of station# 1 is not conducive for a rapid response in the community for mutual response to neighboring communities.

The 2007 study reviewed current station locations in relation to population, statistics and projected growth. This area of the study also addressed the issue of replacing and relocating fire Station# 1.
In reviewing current station locations, the study found Station #2, which is located in the north end of the district and is located on a main east-west road, has acceptable access to its first due district, major roads and the expressway. Additionally, this station is situated on a large parcel with sufficient property for expansion, if future space is needed.

The study found that Station #1 which is located in the south end of the district is located on a small, dead-end side street in a residential area with limited access to its first due district, major roads and

expressways. Built in early 1950s, the station was located in the small village area of the Township where the majority of the population resided. As the Township grew, the majority of the growth was outside the village area. Due to extensive growth in other areas of the Township and the placement of major roads and the M-53 expressway, Station #1 became landlocked with poor access to major roads and the expressway. Increasing traffic problems have made response from the small side street difficult. Additionally, the station has no available space for expansion.

Two additions/renovations were completed at Station# 1 over the past 50 years, with the last renovation completed more than 20 years ago. While these additions and renovations provided additional bay and living space, the station has became woefully inadequate due to increased staffing and the addition of several apparatus, all of which is much larger than what they replaced. This study also reviewed predicted future growth, the need for additional stations and preferred locations. Based on planned and predicted growth, the study indicated that two additional stations will likely be needed with locations in the northeast and southwest areas of the township. However, the study also found that the replacement of Station #1 with a modern facility capable of housing additional equipment and manpower would provide adequate coverage for the near future, and eliminate the immediate need to build a third station.

In addition to the study, research was conducted to identify acceptable sites (minimum of 5 acres) that were available for purchase to construct the new station. Ultimately, eight (8) sites were identified ranging in price from $200,000 to $1,500,000. Site selection was made based on scoring by the following criteria: Physical location, access to M-53 Expressway, on-site (available) utilities, site geological characteristics, impact on surrounding properties and cost of land.

Based on the above criteria, the site identified in this environmental assessment was selected. The selected site is a 5.00 acre site on 27 Mile Road of which the north 1.55 acres will be developed for this facility while the south 1.00 acres will be utilized for on-site storm water detention and the center 2.45 acres to remain undeveloped for future undetermined use. The selected site as well as all neighboring properties on the south side of 27 Mile Road is currently agricultural land. In recent years, residential uses have been developed along the north side of 27 Mile Road and it can be expected that the neighboring agricultural properties will become residential in the future.

The selected site will be home to a single-story 17,745 square foot building. The building will be serviced by concrete-curbed, asphalt paved driveways and on-site parking for 43 vehicles. Upgrades within the existing 27 Mile Road right-of-way shall include an 8-foot wide public walk, acceleration and deceleration lanes, and re-routing of existing storm water ditches. Additionally, existing overhead public electrical and communication cables will be re-routed away from fire apparatus driveways to keep access to 27 Mile Road clear in the event of the cables coming down in a storm. The building will be provided with public water, sewer, natural gas, electric, and communication utilities. Storm water will be collected and contained on-site and routed via underground pipes to a detention pond sized to accommodate a 100-year event. The detention pond will measure approximately 250 feet x 140 feet and will require the removal of 1,975 cubic yards of material. The topsoil portion of this removal will be used to construct the required landscape berms on site, with the remaining material used to mass grade and raise the proposed building pad area to the required grade. The detention pond will have a controlled discharge and flow overland into the existing open Yates Drain to the south of the site.

The building will contain 8,793 square feet of fire station spaces, 4,371 square feet of living quarters, 3,581 square feet of administration headquarters space, and 1,000 square feet of classroom training space. The building will be designed in accordance with the State of Michigan Building Codes, local ordinances, and federal regulations. The building will have a fire alarm, fire suppression (sprinkler) system, and an on-site natural gas-fired emergency back-up generator.

SECTION THREE: AFFECTED ENVIRONMENT AND CONSEQUENCES

3.1 PHYSICAL ENVIRONMENT

3.1.1 Geology, Seismicity and Soils

Per the United States Geological Survey (USGS), Southeast Michigan's physical setting consists of three well-defined regions, two of which directly influence Washington Township. The first of these areas is known as the Erie-St. Clair plain. This area extends for a depth of approximately 25 miles along the shoreline of Lake Huron, Lake St. Clair and Lake Erie, from Michigan's thumb area on the north to Toledo on the south. It also extends east into Canada, encompassing the entire "panhandle" portion of Ontario. This area is a nearly level glacial plain that rises gradually to the west. It is crossed by numerous streams emptying out into the Great Lakes system.

The dividing line between the first area and the adjoining area, known as the Thumb Upland, crosses Washington Township on a diagonal line extending from the southwest to the northeast. This area consists of a hilly, uneven belt of interlobate moraine, pitted with lakes, muck areas, rounded gravelly hills, and relatively poor drainage conditions. The last period of glaciers that covered Michigan was directly responsible for the Township's basic land forms. As these glaciers moved south, they accumulated large quantities of silt that were eventually deposited across southern Michigan and neighboring States. This fertile soil accounts for much of Michigan's productive agricultural land.

The Township's most prominent physical feature is the Birmingham Moraine, a range of hills extending from Shelby Township on the south and running in a northeasterly direction through Lockwood Hills, Carriage Hills, Indian Hills Elementary School and Eastview Estates, eventually entering Bruce Township near Romeo High School. This moraine serves to define the edge of glacial movement in the Township. As temperatures warmed and melted the glacier at a rate equal to this forward movement, soil from the glaciers was deposited in a line parallel to the edge of the glacier, thereby producing this terminal moraine.

The Stony Creek Valley lies directly to the west of the Birmingham Moraine. Stony Creek Lake is the predominant physical feature of this area. This valley was once deeper and broader than it is today. Glacial ice and accumulated material restricted the flow of water through this valley. As a result, the valley was filled with fine-grained outwash. Today, Stony Creek occupies a meandering channel through this valley in the western portion of the Township. Melting glaciers resulted in several lakes that flooded Macomb County at various times. These lakes form the Township's third major geologic feature, the Glacial Lake Bed, which covers the east side of the Township. The shoreline of one of these lakes follows the present-day Grand Trunk Railroad line as far north as 29 Mile Road. Powell Road, in the northeast corner of the Township, marks another portion of this Lake's shoreline. This ancient lake bed helps determine the general physical characteristics of the eastern half of the Township, which is essentially flat except for those drainage channels which cross the area. The proposed Station #1 site is within this flat, eastern area.

According to a topographic survey conducted on the site in 2005 by Community Engineering and Surveying (and verified by Giffels-Webster Engineers in the fall of 2009), elevations of the site range from 683 to 679 (North American Vertical Datum, NAVD 88). Surface topography generally slopes from the high end at the northwest corner of the site to the low end at the southeast.

As a part of site development, soil borings were performed on the subject site. The soil borings were drilled using a truck-mounted rotary drilling rig. Continuous flight, 2-1/4-inch, inside diameter, hollow-stem augers were used to advance the boreholes to the explored depths. Within each soil boring, soil

samples were obtained at intervals of 2-1/2 feet within the upper 10 feet and at intervals of 5 feet below that depth. These samples were obtained by the Standard Penetration Test method (ASTM D 1586), which involves driving a 2-inch diameter split-spoon sampler into the soil with a 140-pound weight falling 30 inches. The sampler is generally driven three successive 6-inch increments with the number of blows for each increment recorded. The number of blows required to advance the sampler the last 12 inches is termed the Standard Penetration Resistance (N). Blow counts for each 6-inch increment and the resulting N-values are presented on the individual soil boring logs.

Approximately 8-1/2 to 12 inches of silty clay and clayey sand topsoil cover the site. Native clayey sand is present below the topsoil within boring B-2 and extends to an approximate depth of 3 feet below grade. Native silty clay underlies the topsoil within the remaining borings and extends to the explored depths of 10 feet within borings B-3 and B-4 and to depths ranging from approximately 11 to 11-1/2 below grade within borings B-1 and B-2. However, a stratum of sandy silt is present within the silty clay within boring B-3 from a depth of 6 feet extending to approximately 7-1/2 below grade. Also, a stratum of silty sand is present within the silty clay within boring B-1 from a depth of 3-1/2 feet extending to approximately 4-1/2 below grade. Native sandy clay underlines the native silty clay within borings B-1 and B-2 and extends to the explored depths of 20 feet below grade.

In general, the native silty clay within the upper 5 feet is soft to stiff in consistency with natural moisture contents ranging from 21 to 32 percent, dry densities ranging from 85 to 110 pounds per cubic foot (pcf), and unconfined compressive strengths ranging from 580 to 2,500 pounds per square foot (psf). The native silty clay below a depth of 5 feet is hard in consistency with natural moisture contents ranging from 10 to 22 percent and an unconfined compressive strength of 9,000 psf. The native clayey sand is very loose in compactness with a Standard Penetration Test N-value of 3 blows per foot. The native silty sand within boring B-1 is medium compact with an N-value of 17 blows per foot. The native sandy silt within boring B-3 is medium compact with an N-value of 26 blows per foot. The native sandy clay is hard in consistency with natural moisture contents ranging from 8 to 10 percent and an unconfined compressive strength of 9,000 psf.

The Farmland Protection Policy Act (FPPA) (P.L. 97-98, Sec. 1539-1549; 7 U.S.C. 4201, et seq.) was enacted in 1981 (P.L. 98-98) to minimize the unnecessary conversion of farmland to non-agricultural uses as a result of federal actions. Programs administered by federal agencies must be compatible with state and local farmland protection policies and programs. The Natural Resources Conservation Service (NRCS) is responsible for protecting significant agricultural lands from irreversible conversions that result in the loss of an essential food or environmental source. Prime farmland is characterized as land with the best physical and chemical characteristics for the production of food, feed, forage, fiber and oilseed crops (USDA, 1989). This land is either used for food or fiber crops or is available for those crops, but is not urban, built-up land, or water areas.

A Farmland Conversion Impact Rating form (AD-1006) was completed (refer to Appendix C) and resulted in a site assessment score of 57. The site was scored based on the assumption that the property was a part of a larger 42 acre parcel located at the southwest corner of Jewell and 27 Mile Roads. The 5 acre subject site was carved out of this 42 acre parcel and split to create a separate parcel. However, to make a fair comparison to other farming units within the County, the property as a whole (all 42 acres) was evaluated against the AD-1006 criteria. More specifically, only portions of the 42 acres have been farmed five out of the last ten years, approximately 50 percent, giving a score of 10 for question 3.

The NRCS does not require the submission of Form AD-1006 in cases where the site assessment criteria score (Part VI of the form) is less than 60 points for each alternative; therefore, it has been determined that the FPPA would not apply to the proposed project.

Alternative 1: No Action – Under this alternative, no impacts to the geology or soils of the existing site would occur.

Alternative 2: Remodel Existing Station – Under this alternative, construction activities would not be subsurface and therefore would not impact underlying geological resources. Short-term impacts to soils may occur during construction activities related to construction vehicle loading and traffic. Appropriate soil erosion best management practices (BMPs) such as silt fence, inlet filters and mud tracking mats and restoration work would be implemented to minimize storm water runoff. This would be minimal as most proposed work would be related to building and not site construction.

Alternative 3: New Fire Station #1 (Proposed Action) – Under this proposed alternative, construction activities would not be deep enough to impact underlying geological resources. Short-term impacts to soils may occur during construction activities related to the disturbance of approximately 12,500 SY of the proposed site. Appropriate soil erosion best management practices (BMPs) such as silt fence, inlet filters and mud tracking mats and restoration work would be implemented to minimize storm water runoff. Any stockpiles of topsoil or clean fill material will be surrounded by silt fence and covered as necessary to prevent fugitive dust and soil erosion. The construction of the proposed detention pond will require the removal of approximately 1,975 cubic yards of material, which will be used on-site to construct screening berms and raise the proposed building pad elevations to plan.

3.1.2 Water Resources and Water Quality

The Clean Water Act (CWA), as amended in 1977, established the basic framework for regulating discharges of pollutants into waters of the United States.

Existing site topography is shown on the project survey plan in Appendix A. The 5.0-acre project site is currently used as agricultural land and was recently tilled following the close of the growing season. There are no existing structures on the site. Existing drainage on site generally flows from a high end at the northwest corner of the site down to the low end at the southeast. There is approximately four feet of fall across the site.

The proposed project consists of the construction of an approximately 17,000 square foot fire station and associated parking on 5 acres of currently undeveloped agricultural land. The proposed parking facilities shall be constructed of standard and heavy duty asphalt with concrete walks providing ADA compliant connections to the proposed building. Water main and sanitary leads shall be connected to existing facilities in the 27 Mile Road right-of-way. The construction of the proposed Fire Station #1 will increase the volume of runoff produced by the site. All storm water runoff shall be collected via traditional catch basins and pipes and connect to a proposed detention basin at the southeast corner of the site. The regulated outlet of this pond shall discharge overland and eventually flow to the existing Yates Drain south of the site.

Alternative 1: No Action – Under this alternative, no impacts to the surface water of the existing site would occur.

Alternative 2: Remodel Existing Station – Under this alternative and as previously discussed, construction activities would be limited to the existing footprint of the building; therefore, there would be no increase to impervious land and thus no impact on existing surface waters of the existing site.

Alternative 3: New Fire Station #1 (Proposed Action) – Under this proposed alternative, construction activities would increase the amount of impervious land within the subject parcel and therefore increase runoff. However, this increase in runoff would be mitigated by the construction of a detention pond at the south end of the site. This basin will collect and slowly release the site storm runoff at a level equal to the

original site. In addition, temporary soil erosion control measures shall be installed and maintained throughout construction to prevent soil erosion into existing surface runoff. A National Pollution Discharge Elimination System (NPDES) permit will be required for the site.

3.1.3 Floodplain Management (Executive Order 11988)

Executive Order (EO) 11988 requires federal agencies to take action to minimize occupancy and modification of the floodplain. Specifically, EO 11988 prohibits federal agencies from funding construction in the 100-year floodplain unless there are no practicable alternatives. FEMA's regulations for complying with EO 11988 are promulgated in 44 CFR Part 9.

This project is not within the 100-year floodplain or 500-year floodplain as indicated in the FIRM (Flood Insurance Rate Map), panel # 2604470210G for Washington Township, Macomb County, Michigan.

Alternative 1: No Action – The existing Station #1 does not lie within a 100-yr floodplain, therefore there are no impacts to the floodplain.

Alternative 2: Remodel Existing Station – The existing Station #1 does not lie within a 100-yr floodplain, therefore there are no impacts to the floodplain.

Alternative 3: New Fire Station #1 (Proposed Action) – The proposed site does not lie within a 100-yr or 500-yr floodplain, therefore there are no impacts to the floodplain.

3.1.4 Air Quality

The Clean Air Act requires the U.S. Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment; the Clean Air Act established two types of national air quality standards; primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly; secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation and buildings; current criteria pollutants are: Carbon Monoxide (CO), Nitrogen Dioxide (NO_2), Ozone (O_3), Lead (Pb), Particulate Matter (PM_{10}), and Sulfur Dioxide (SO_2). Data for Macomb County is only currently available from the USEPA for Carbon Monoxide, Ozone, Particulate Matter and Sulfur Dioxide. For 2007 data, all available values where in attainment with the exception of the 8 hour levels for Ozone.

Alternative 1: No Action – Under this alternative, there would be no impacts to air quality because no construction would occur.

Alternative 2: Remodel Existing Station – Under this alternative and as previously discussed, construction activities would be limited to the existing footprint of the building; therefore, there would be minor impacts to air quality. These would be mitigated by wetting down areas of disturbance to limit fugitive dust. In addition, emissions from fuel-burning engines could also temporarily increase the levels of some criteria pollutants, such as CO, NO2, O3, PM10 and some noncriteria pollutants such as volatile organic compounds (VOCs). To mitigate all of these emissions, fuel-burning equipment run times will be kept to a minimum and equipment would be properly maintained.

Alternative 3: New Fire Station #1 (Proposed Action) – Under this proposed alternative, construction activities would create short-term impacts to air quality in and around the site. These would be mitigated by wetting down areas of disturbance to limit fugitive dust. In addition, emissions from fuel-burning engines could also temporarily increase the levels of some criteria pollutants, such as CO, NO2, O3, PM10 and some noncriteria pollutants such as volatile organic compounds (VOCs). To mitigate all of

these emissions, fuel-burning equipment run times will be kept to a minimum and equipment would be properly maintained. No permits for maintaining air quality are required.

3.2 BIOLOGICAL ENVIRONMENT

3.2.1 Terrestrial and Aquatic Environment

The proposed project site is a farm field in the southeastern quadrant of the Township. According to area residents, the site and surrounding lands have been in agricultural production for at least the past 50 years. The site is still actively farmed as recently as the summer of 2009. The area south of the site, across the Yates Drain is currently a mobile home park, with the area north of the site a dense ranch condominium development. The homes in the area were built within the last 15-20 years. The proposed site supports wildlife common to rural agricultural land, including song birds, reptiles, amphibians, small mammals, and white-tailed deer. Because the site and surrounding area has been farmed and developed, it would be considered to have limited value for plant and wildlife species.

The Department of Natural Resources (DNR) website for Endangered Species Assessment was utilized to determine if there are any known or listed endangered, threatened, or special concern species, high quality natural communities, or other unique natural features known to occur at or near the proposed site. Upon entering the site location data, the DNR assessment indicated that none of those features were present at the subject site. As such, there are no potential impacts to terrestrial and aquatic environments.

Alternative 1: No Action – Under this alternative, there would be no impacts to the terrestrial and aquatic environment because no construction would occur.

Alternative 2: Remodel Existing Station – Under this alternative and as previously discussed, construction activities would be limited to the existing footprint of the building; therefore, there would be no impacts to terrestrial and aquatic environments.

Alternative 3: New Fire Station #1 (Proposed Action) – Under this proposed alternative, and based on the DNR assessment, the construction of a new Station #1 would not have any impacts on existing terrestrial or aquatic environments.

3.2.2 Wetlands (Executive Order 11990)

The USACE regulates the discharge of dredged or filled material into waters of the U.S., including wetlands, pursuant to Section 404 of the CWA. Additionally, EO 11990 (Protection of Wetlands) requires Federal agencies to avoid, to the extent possible, adverse impacts on wetlands that may result from federally funded actions. Regulated wetlands in Michigan are also protected by the Michigan Department of Environmental Quality.

No wetlands or surface waters have been identified on-site or adjacent to it. In addition to a site visit by Giffels-Webster Engineers' wetland biologist, the MDEQ Preliminary Wetland Inventory and the National Wetland Inventory maps were reviewed and no wetlands were noted on the property. The nearest surface water is the Yates Drain, located approximately 650 feet to the southeast of the subject 5 acre parcel. The nearest mapped wetland area are linear wetlands associated with this drain.

Alternative 1: No Action – Under this alternative, there would be no impacts to existing wetlands because no construction would occur.

Alternative 2: Remodel Existing Station – Under this alternative and as previously discussed, construction activities would be limited to the existing footprint of the building; therefore, there would be no impacts to any existing wetlands.

Alternative 3: New Fire Station #1 (Proposed Action) – Under this proposed alternative, no impacts to waters of the U.S., including wetlands, would occur because none are present on or near the proposed project site. Wetlands closest to the proposed project site (650 feet southeast) are outside of the area to be disturbed by grading or filling and would not be directly or indirectly impacted by construction. During construction, the use of BMPs would minimize erosion at the site and mitigate potential impacts to the nearest water resources. Appropriate BMPs would be required at the construction site, including, but not limited to, the installation of silt fences and the revegetation of bare soils to minimize erosion. The project's Stormwater Management and Erosion Control Plan is provided in Appendix A.

3.2.3 Threatened and Endangered Species

The proposed project site is a farm field in the southeastern quadrant of the Township. According to area residents, the site and surrounding lands have been in agricultural production for at least the past 50 years. The site is still actively farmed as recently as the summer of 2009. The area south of the site, across the Yates Drain is currently a mobile home park, with the area north of the site a dense ranch condominium development. The homes in the area were built within the last 15-20 years. The proposed site supports wildlife common to rural agricultural land, including song birds, reptiles, amphibians, small mammals, and white-tailed deer. Because the site and surrounding area has been farmed and developed, it would be considered to have limited value for plant and wildlife species.

In accordance with Section 7 of the Endangered Species Act (ESA) of 1973, the project area was evaluated for the potential occurrences of federally listed threatened and endangered species. The ESA requires any federal agency that funds, authorizes or carries out an action to ensure that their action is not likely to jeopardize the continued existence of any endangered or threatened species (including plant species) or result in the destruction or adverse modification of designated critical habitats (FEMA 1996).

In compliance with Section 7 of the Endangered Species Act, a review of the potential impacts to federally listed endangered, threatened and candidate species has been completed. According to the U.S. Fish and Wildlife technical assistance website, the following federally listed species are known to occur in Macomb County: Indiana Bat (endangered), Eastern massasauga (candidate), and Rayed bean mussel (candidate).

The Department of Natural Resources (DNR) website for Endangered Species Assessment was utilized to determine if there are any known or listed endangered, threatened, or special concern species, high quality natural communities, or other unique natural features known to occur at or near the proposed site. Upon entering the site location data, the DNR assessment indicated that none of those features were present at the subject site. As such, there are no potential impacts to any of these components.

In addition, in conformance with Section 7 of the Endangered Species Act, FEMA has conducted a review of potential impacts to federally listed threatened, endangered and candidate species. A copy of these findings (no impacts were found based on the proposed project) are provided in Appendix C.

Alternative 1: No Action – Under this alternative, there would be no impacts to any existing threatened or endangered species because no construction would occur.

Alternative 2: Remodel Existing Station – Under this alternative and as previously discussed, construction activities would be limited to the existing footprint of the building; therefore, there would be no impacts to any existing threatened or endangered species.

Alternative 3: New Fire Station #1 (Proposed Action) – Under this proposed alternative, no trees will be removed from proposed project site and no alterations will be made to existing floodplain areas or

watercourses. Project area is currently bare agriculture land with limited value for plant and wildlife species. No impacts to existing federal or state listed endangered species or critical habitat is anticipated.

3.3 HAZARDOUS MATERIALS

A Phase I environmental study of the subject property was performed in September of 2009. A visual survey of the site was conducted to determine the presence of any hazardous materials. During the site survey, no apparent visual indications (e.g., vent pipes, fill pipes, etc.) of the current presence of underground storage tanks (USTs) or aboveground storage tanks (ASTs) were noted within the subject property. Also, the Michigan Department of Environmental Quality does not identify any registered storage tanks within the subject property. Furthermore, the Township of Washington Building Department or Fire Department does not have records of permits for the installation or removal of storage tanks within the subject property.

No apparent visual indications of the presence of containers with hazardous materials or petroleum products that might represent an REC were observed on the subject property. No apparent olfactory indications of the presence of strong, pungent, or noxious odors were observed within the subject property. No apparent pools of liquid were observed on the subject property. No apparent visual indications of the presence of drums or containers on the subject property that likely contain hazardous substances or petroleum products were observed. No apparent visual indications of the presence of open or damaged containers containing unidentified substances suspected of being hazardous substances or petroleum products were observed on the subject property.

During the visual survey, the subject property was surveyed for the presence of liquid-cooled electrical units (e.g., transformers, ballasts, etc.). Such units are of possible concern because they may be potential polychlorinated biphenyls (PCB) sources. PCB units may subject the owner/operator to various regulatory requirements under the Toxic Substance Control Act (TSCA). The release of PCB fluids or their combustion products (in case of spill or fire) are potential environmental liabilities and may require remedial actions. No electrical transformers were observed to be associated with the subject property. In addition, no suspect hydraulic equipment was observed to be within the subject property.

No apparent visual indications of the presence of areas, mounds, or depressions that may be filled or graded by non-natural causes or filled with fill of unknown origin suggesting trash or other solid waste disposal were observed on the subject property. In addition, based on review of the Macomb County Environmental Health Department Solid Waste Disposal Maps the subject property is not located at or within the vicinity of a historic solid waste disposal facility.

This assessment has revealed no evidence of recognized hazardous material conditions in connection with the property.

Alternative 1: No Action – Under this alternative, there would be no impacts from hazardous materials because no construction would occur.

Alternative 2: Remodel Existing Station – Under this alternative and as previously discussed, construction activities would be limited to the existing footprint of the building; therefore, there would be no impacts from hazardous materials.

Alternative 3: New Fire Station #1 (Proposed Action) – Under this proposed alternative, there would be no impacts from hazardous materials because none are present on the proposed project site.

3.4 SOCIOECONOMICS

3.4.1 Zoning and Land Use

The proposed project site is located on the southeast corner of the Charter Township of Washington, just northeast of the village district and the existing Station #1 on Wicker Street. The property is currently zoned R1-B, with surrounding properties to the north, south, east and west all zoned some form of residential. A copy of the Zoning Map and Township Land Use Plan has been included in Appendix A for reference. The construction of a fire station is exempt from the Washington Township zoning Ordinance, however, during an advisory review by the Township Planning Commission and the Township Planner, the proposed project and development of the subject site was found to be consistent with the residential zoning classification and approval special land uses for R1-B district.

Alternative 1: No Action – Under this alternative, there would be no impacts to existing land use or zoning because no construction would occur.

Alternative 2: Remodel Existing Station – Under this alternative and as previously discussed, construction activities would be limited to the existing footprint of the building; therefore, any proposed vertical additions to the building would be required to conform to the strict standards of the Village District as spelled out in the Zoning Ordinance. This would require significant façade improvements and other aesthetic building improvements to bring the existing structure into conformance with the surrounding village.

Alternative 3: New Fire Station #1 (Proposed Action)– Under this proposed alternative, there are no anticipated zoning or land use impacts associated with the construction of the proposed Station #1 in a R1-B district. As stated above, the Township Planning Commission recommended approval of the proposed development based on the conformance of the project to the zoning ordinance and proposed landscape buffering and screening the project will have to the surrounding property.

3.4.2 Visual Resources

The proposed project site is a farm field in the southeastern quadrant of the Township. According to area residents, the site and surrounding lands have been in agricultural production for at least the past 50 years. The site is still actively farmed as recently as the summer of 2009. The area south of the site, across the Yates Drain is currently a mobile home park, with the area north of the site a dense ranch condominium development. The landscape character of the site is generally flat expansive land with few visual obstructions since no existing buildings or above ground structures are present on site. Standing in the middle of the site, an observer can generally see up to ½ mile in all directions, interrupted only by low lying residential structures to the north and a wooded area along the Yates Drain to the south. Refer to Appendix B for site photos illustrating the existing visual resources of the site.

Alternative 1: No Action – Under this alternative, there would be no impacts to the visual resources of the existing station because no construction would occur.

Alternative 2: Remodel Existing Station – Under this alternative and as previously discussed, construction activities would be limited to the existing footprint of the building; therefore, there would be minor impacts to the existing visual resources surrounding Station #1 due to an increased building height. These impacts could be softened by the installation of canopy or evergreen trees to provide visual distraction from the larger building.

Alternative 3: New Fire Station #1 – Under this proposed alternative, the construction of the proposed Station #1 would become a new obstruction to the existing visual resources of the site and surrounding properties. The architects of the proposed development have designed a building that matches the

residential character of the surrounding properties and developments. The future residential use of the property surrounding the subject site, will tie into the proposed Station #1 to provide a uniform visual landscape along the south side of 27 Mile Road.

3.4.3 Noise

Noise can be considered unwanted sound and sound is typically measured in decibels (dB). An average measure of sound is known as the day-night average sound level (Ldn), and is used by agencies for estimating sound impacts and establishing guidelines for compatible land uses. An EPA document, Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (EPA, 1974) provides a basis for State and local governments' judgments in setting standards. The document identifies a 24-hour exposure level of 70 dB as the level of environmental noise that will prevent any measurable hearing loss over a lifetime. Also, levels of 55 dB outdoors and 45 dB indoors are identified as preventing activity interference and annoyance. These levels are considered those which will permit spoken conversation and other activities such as sleeping, working and recreation. The levels are not single event, or "peak" levels, but rather, they represent averages over long periods of time. An occasional higher noise levels would be consistent with a 24-hour average of 70 dB, as long as a sufficient amount of relative quiet is experienced.

The sound level of a typical sound outdoors falls off in level at 6 dB per doubling of distance. In the case of a typical siren, the noise would be 115 dB at a distance of 10 feet from the source, 109 dB 20 feet, 103 dB at 40 feet, 97 dB at 80 feet, 91 dB at 160 feet, 85 dB at 320 feet, 79 dB at 640 feet, 73 dB at 1280 feet, 67 dB at 2560 and approximately 60 dB at a distance of 1 mile. The subject site is located on 27 Mile Road between M-53 and Jewell Road, with residential and agricultural uses all on four sides. These neighborhoods would therefore be impacted by the noise of sirens and equipment generated by the proposed station.

Alternative 1: No Action – Under this alternative, there would be no noise because no construction would occur.

Alternative 2: Remodel Existing Station – Under this alternative, only temporary short-term increases in noise levels would be anticipated during construction. To reduce noise levels during that period, construction activities would be restricted to normal daylight business hours. Ultimately, equipment and machinery utilized at the site would meet all local, State, and Federal noise regulations.

Over the long term, no significant change to noise levels would be anticipated based on a remodeled and expanded Station #1. The site is currently used as the fire station, in a residential area on Wicker Street just east of Van Dyke Road. Again, because of the size the site and numerous constraints on expansion at the site, any remodeling and expansion of the facility would be limited to vertical expansion and thus, no significant change to noise levels would be anticipated.

Alternative 3: New Fire Station #1 – Under this alternative, only temporary short-term increases in noise levels would be anticipated during construction. To reduce noise levels during that period, construction activities would be restricted to normal daylight business hours. Ultimately, equipment and machinery utilized at the site would meet all local, State, and Federal noise regulations.

Over the long term, vehicle traffic would certainly increase at the proposed project site, primarily when Fire/ALS personnel are training or responding to traffic accidents, fires, severe weather, or other emergency events. The increased traffic and sirens would increase the noise level, but these increases would be very short in duration and would occur very infrequently. It is anticipated that these noise peaks would not cause a violation of the EPA's 24-hour exposure levels.

3.4.4 Public Services and Utilities

Public services to the proposed 5 acre site include: police, fire, sewer and water. They are provided by the Macomb County Sherriff, Washington Township Fire Department and the Washington Township Water and Sewer Department respectively. Private gas service is provided by Semco, electricity by DTE Energy, cable by Comcast and telephone service by AT&T. The site is within the Romeo Community School District.

Alternative 1: No Action – Under this alternative, there would be no impacts to existing public services and utilities because no construction would occur.

Alternative 2: Remodel Existing Station – Under this alternative and as previously discussed, construction activities would be limited to the existing footprint of the building; therefore, generally speaking there would be minimal impacts to existing public services and utilities. If the building were expanded in its current location, existing utility taps would be utilized for the building with possible increases to the electrical service provided. However, by keeping the fire station in this location, public service associated with fire response time would continue to degrade. Because of the limited street access associated with the current location of Station #1, response times to that station's service area could be impacted negatively.

Alternative 3: New Fire Station #1 (Proposed Action) – Under this proposed alternative, the construction of the proposed Fire Station #1 would require the use of all the above public services and utilities. All are available to the site and connections to the proposed building and site have been proposed as a part of the project. All existing utility providers have confirmed that their existing systems can provide service to the proposed project as designed.

3.4.5 Traffic and Circulation

The existing public roads adjacent or near the project site include 27 Mile Road (frontage), Jewell Road (to the east), M-53 (limited access highway to the west) and Van Dyke Road (to the west). All roads (herein referred to as the local roads) with the exception of M-53 are under the jurisdiction of the Road Commission of Macomb County (RCMC), which is under the jurisdiction of the Michigan Department of Transportation (MDOT). All local roads are 2 lane asphalt roads. All construction traffic shall enter and exit the site from 27 Mile Road. Mud mats will be installed at this access point to limit tracking of mud and debris onto 27 Mile Road. Public transportation within the Township and immediate area is limited to community mini-buses.

Alternative 1: No Action – Under this alternative, there would be no impacts to existing traffic and circulation because no construction would occur.

Alternative 2: Remodel Existing Station – Under this alternative and as previously discussed, construction activities would be limited to the existing footprint of the building; therefore, there would be limited impacts to traffic and circulation during the construction period. These would be mitigated by preventing parking of any construction equipment or vehicles on Wicker Street during business hours.

Alternative 3: New Fire Station #1 (Proposed Action) – Under this proposed alternative, the construction of the proposed Fire Station #1 would create short term traffic and circulation impacts related to construction traffic coming to and from the site. No parking would be permitted on 27 Mile Road and the proposed accel/decel lanes will be constructed as early as possible to prevent traffic back-ups from turning construction vehicles entering or leaving the site. Long term impacts would be a very minor increase of trips generated by the site using 27 Mile Road and the surrounding local roads. The RCMC did not deem these impacts significant enough to require a traffic study on 27 Mile Road, instead requiring the construction of accel/decel lanes and a by-pass lane on the north side of 27 Mile Road.

3.4.6 Environmental Justice (Executive Order 12898)

On February 11, 1994, President Clinton signed Executive Order (EO) 12898, entitled, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations". The EO directs federal agencies, "to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States…" Socioeconomic and demographic data for the project area were analyzed to determine if a disproportionate number of minority or low-income persons have the potential to be adversely affected by the proposed project.

2000 US Census data for Washington Township indicates that 97.23% of the population is white, 0.49% African American, 0.26% Native American, 0.62% Asian, 0.02% Pacific Islander, 0.58% from other races and 0.79% from two or more races. No concentrations of minority or low income populations were identified near the proposed subject site.

Alternative 1: No Action – Under this alternative, there would be no disproportionally high and adverse impacts on minority or low-income populations because no construction would occur.

Alternative 2: Remodel Existing Station – Under this alternative, there would be no disproportionally high and adverse impacts on minority or low-income populations. Improvements or expansion of the existing Wicker Street Station would benefit all populations of the Township.

Alternative 3: New Fire Station #1 (Proposed Action) – Under this alternative, there would be no disproportionally high and adverse impacts on minority or low-income populations. Construction of a new fire station to increase fire response and efficiency would benefit all populations of the Township.

3.4.7 Safety and Security

To minimize risks to safety and human health, all construction activities would be performed using qualified personnel trained in the proper use of the appropriate equipment including all appropriate safety precautions; additionally, all activities would be conducted in a safe manner in accordance with the standards specified in Occupational Safety and Health Act (OSHA) regulations. EO 13045, Protection of Children, requires federal agencies to make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children.

Alternative 1: No Action – Under this alternative, there would be no construction on site and therefore no risk to the safety and security of the Township's population.

Alternative 2: Remodel Existing Station – Under this alternative, a remodel and expansion to the existing Wicker Street Station would increase fire protection and the safety of the Township's population.

Construction activities could present safety risks to those performing the activities. Access to the site will be restricted to protect the public and to minimize risks to safety and human health. Appropriate signage and barriers would be in place prior to construction activities to alert pedestrians and motorists of project activities. There would be no disproportionate health and safety risks to children.

Alternative 3: New Fire Station #1 (Proposed Action) – Under this alternative, the construction of a new fire station would increase the Township's fire protection and directly increase the safety and security of the Township's population.

Construction activities could present safety risks to those performing the activities. Access to the site will be restricted to protect the public and to minimize risks to safety and human health. Appropriate signage and barriers would be in place prior to construction activities to alert pedestrians and motorists of project activities. There would be no disproportionate health and safety risks to children.

3.5 HISTORIC AND CULTURAL RESOURCES

In addition to review under NEPA, consideration of effects to historic properties is mandated under Section 106 of the National Historic Preservation Act (NHPA), as amended, and implemented by 36 CFR Part 800. Requirements include identification of significant historic properties that may be affected by the Proposed Action. Historic properties are defined as archaeological sites, standing structures, or other historic resources listed in or eligible for listing in the National Register of Historic Places (NRHP) (36 CFR 60.4).

As defined in 36 CFR Part 800.16(d), the Area of Potential Effect (APE), "is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if such properties exist."

In addition to identifying historic properties that may exist in the proposed project's APE, FEMA must also determine, in consultation with the appropriate State Historic Preservation Officer (SHPO)/Tribal Historic Preservation Officer (THPO), what effect, if any, the action will have on historic properties. Moreover, if the project would have an adverse effect on these properties, FEMA must consult with SHPO/THPO on ways to avoid, minimize, or mitigate the adverse effect

During construction, ground disturbing activities would be monitored. Should human skeletal remains or historic or archaeological materials be discovered during construction, all ground-disturbing activities on the project site would cease and the coroner's office (in the case of human remains), FEMA, and the Michigan Historic Preservation Office would be notified immediately.

Alternative 1: No Action – Under this alternative, there would be no construction on site and therefore no impacts to historic or cultural resources.

Alternative 2: Remodel Existing Station – Under this alternative, a remodel and expansion to the existing Wicker Street Station would occur within the existing footprint of the station and therefore would have no impacts to historic or cultural resources.

Alternative 3: New Fire Station #1 (Proposed Action) – Under this proposed alternative, the construction of a new Station #1 could have potential to impact historic or cultural resources. Evaluation of the Proposed Action is described in Sections 3.5.1 and 3.5.2.

3.5.1 Historic Structures and Archaeological Resources

On December 28, 2009, a letter and supporting documentation was submitted to the SHPO with a Request for SHPO Comment and Consultation on a Federal Undertaking. The request included documentation gathered by Giffels-Webster Engineers and FEMA on historic properties in the area of the proposed project site. The State Historic Preservation Office responded to the request on January 28, 2010. The response indicated that it is the opinion of the State Historic Preservation Officer that no historic properties are affected within the area of potential effects of this undertaking. A copy of the FEMA request and associated SHPO consultation letter has been included in Appendix C.

3.5.2 Tribal Coordination and Religious Sites

On November 6, 2000, President Clinton signed Executive Order (EO) 13175, entitled, "Consultation and Coordination with Indian Tribal Governments". The EO directs federal agencies, "to establish regular and meaningful consultation and collaboration with tribal officials in the development of Federal policies that have tribal implications, to strengthen the United States government-to-government relationships with Indian tribes, and to reduce the imposition of unfunded mandates upon Indian tribes…"

Requests for evaluation of the presence or absence of known archaeological and Indian Religious sites within the proposed project areas were submitted on December 23, 2009 to recognized Tribes that may have an interest in projects located in Macomb County, Michigan. Those tribes include; Bay Mills Indian Community, Burt Lake Band OF Ottawa & Chippewa Indians, Grand River Band of Ottawa Indians, Grand Traverse Band of Ottawa and Chippewa Indians, Grand Traverse Band of Ottawa and Chippewa Indians, Keweenaw Bay Indian Community, Lac Vieux Desert Band of Lake Superior Chippewa Indians, Little River Band of Ottawa, Little Traverse Bay Band of Odawa, Match-e-be-nash-shee-wish Band of Potawatomi Indians, Nottawaseppi Band of Huron Potawtomi, Pokagon Band of Potawatomi, Saginaw Chippewa Indian Tribe of Michigan, and Sault Ste. Marie Tribe of Chippewa.

To date, three tribes have provided a response of no impact of the project on their interests. These responses are included in Appendix C.

3.6 Comparison of Alternatives

The following table summarizes the impacts and mitigation of Alternatives 2 and 3. Because Alternative 1 is a no action alternative and thus there is no impact, it has not been included in this table.

Table 1: Impact and Mitigation Summary		
Affected Environment	**Impacts**	**Mitigation**
Geology and Soils	Alt 2: No impact	Applicable soil erosion BMPs: silt fence, quick establishment of vegetation
	Alt 3: No impact to geology, short term impact to soils during construction. Construction would disturb about 12,500 SY of the site.	
Water Quality (including surface and ground water	Alt 2: No impact	None
	Alt 3: Short-term impacts to surface water are possible during construction. No impact to water resources. Site has public water.	
Floodplain	Alt 2: No impact, proposed site does not lie in the 100 or 500-yr floodplain	None
	Alt 3: No impact, existing site does not lie in the 100 or 500-yr floodplain	
Air Quality	Alts 2 & 3: Short-term impacts from construction dust and equipment emissions during construction	Water down disturbed area of the site. Keep fuel burning equipment use to a minimum.
Terrestrial and Aquatic Environments	Alt 2: No impact	None
	Alt 3: No impact	
Waters of the U.S. including wetlands	Alt 2: No impact	None
	Alt 3: No impact	
Threatened and Endangered Species	Alt 2: No impact	None
	Alt 3: No impact	
Hazardous Materials	Alts 2 & 3: No impacts anticipated. No hazardous materials are anticipated at either location and no releases of contaminants to the environment have been reported	None

Table 1: Impact and Mitigation Summary		
Affected Environment	**Impacts**	**Mitigation**
Zoning, Land Use and Transportation	Alt 2: No impact	All construction vehicles will be stored on site with applicable construction signage. A new entrance with accel/decel lanes and a bypass lane to be constructed for ingress/egress to the site.
	Alt 3: The proposed development is consistent with the R1-B zoning designation. Some construction traffic, with minor long-term increase to traffic.	
Noise	Alt 2: Short-term impact during construction	Construction would be limited to day light business hours. Siren noise would be infrequent and of very short durations when occurring and would not exceed EPA 24-hr exposure.
	Alt 3: Short-term impact during construction, long-term impact would include siren noise and increased road traffic.	
Public Services and Utilities	Alt 2: No impact	None
	Alt 3: No impact	
Environmental Justice	Alts 2 & 3: No disproportionately high or adverse effect on minority or low-income populations is anticipated.	None
Public Health and Safety	Alts 2 & 3: Both alts would have positive long-term impacts on the health and safety of the population.	None
Historic and Cultural Resources	Alts 2 & 3: No impacts are anticipated	During construction, ground disturbing activities would be monitored. Should human skeletal remains or historic or archaeological materials be discovered during construction, all ground-disturbing activities on the project site would cease and the coroner's office (in the case of human remains), FEMA, and the Michigan Historic Preservation Office would be notified immediately.

SECTION FOUR: CUMULATIVE IMPACTS

According to CEQ regulations, cumulative impacts represent the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7)." In accordance with NEPA and to the extent reasonable and practical, this EA considered the combined effect of the Proposed Action Alternative and other actions occurring or proposed in the vicinity of the proposed project site.

No proposed or current actions by others were identified in the vicinity of the proposed project site; therefore, no cumulative impacts are anticipated.

SECTION FIVE: PUBLIC PARTICIPATION

FEMA is the lead Federal agency for conducting the NEPA compliance process for the proposed Washington Township Fire Station #1 in the Charter Township of Washington, Macomb County, Michigan. It is the goal of the lead agency to expedite the preparation and review of NEPA documents and to be responsive to the needs of the community and the purpose and need of the proposed action while meeting the intent of NEPA and complying with all NEPA provisions.

Interagency reviews have been conducted in the form of agency consultation letters and the responses received from the agencies. Applicable agency responses have been provided in Appendix C.

The proposed project has been discussed at numerous Washington Township Board of Trustees meetings, all of which are open to the public and welcome public comments. In addition, the project was reviewed, discussed and recommended for approval by the Township Planning Commission in a public meeting also with open public comments accepted.

The Charter Township of Washington will notify the public of the availability of the draft EA through publication of a public notice in a local newspaper as required. FEMA will conduct a public comment period commencing on the initial date of publication of the public notice.

SECTION SIX: MITIGATION MEASURES AND PERMITS

There are no proposed mitigation measures.

In accordance with applicable local, State, and Federal regulations, the applicant would be responsible for acquiring any necessary permits prior to commencing construction at the proposed project site. The following permits and approvals may be required prior to construction:

1. National Pollutant Discharge Elimination System
2. Macomb County Public Works – Soil Erosion
3. Road Commission of Macomb County
4. Building Permit (Charter Township of Washington)
5. Land Development Permit (Washington Township Water and Sewer)

SECTION SEVEN: CONSULTATIONS AND REFERENCES

The following agencies and organizations were consulted or were contacted to request project review during the preparation of this EA. Responses received to date are included in Appendix C.

1. Michigan Department of Natural Resources
2. Michigan Department of Environmental Quality
3. Michigan State Historic Preservation Office, Environmental Review Office
4. Charter Township of Washington
5. Washington Township Fire Department
6. Washington Township Water and Sewer Department
7. Various Native American Tribes

SECTION EIGHT: LIST OF PREPARERS

Preparation and quality control review of the draft and final EA:

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